Remarks

The Applicants first wish to thank the Examiner for the courtesy extended to Applicant's attorney during the telephone Interview on August 21, 2002.

The Office Action mailed August 6, 2002 has been carefully considered. After such consideration, Claims 40 been amended to correct minor clerical error. Claims 1-3, 22-40, 46 and 47 remain in the case with none of the claims yet being allowed.

The Office Action objected to Claim 40 for the minor informality of Claim 40 being dependant on cancelled Claims 31. Amendment of Claim 40 to be depend from Claim 22 remedies the minor informality. The informality having been remedied, renders the objection moot.

The Final Office Action had rejected Claims 1-3, 10-12, 24, and 40 under 35 U.S.C. 112, first paragraph, as containing subject matter which is not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the specification was filed, had possession of the claimed invention. Specifically, the Office Action stated that "[t]he present disclosure does not support a flux from the adsorption material being separate from the mainstream combustion products." Further, the Office Action stated that "[a]t page 5 of the present disclosure, support is provided for the presence of a flux from the adsorption material but does not support said flux from the main stream combustion products." Applicants respectfully disagree.

During the telephone conversation with the Examiner on August 21, 2002, the fact that the flux from the adsorbing material is separate from the mainstream combustion products was discussed. The Examiner indicated that a showing that the specification teaches that the flux from the adsorbing material is separate from the mainstream combustion products would persuade him to withdraw the rejection.

To that end, the Examiner's attention is directed to the following passages:

> In use, the carbon monoxide pump selectively diverts carbon monoxide from main stream combustion products, the catalyst at least partially oxidizes the carbon monoxide to carbon dioxide and the venting holes provide an alternative path for the

diverted carbon monoxide and the oxidized carbon monoxide to reduce inhalation by a smoker. [Emphasis Added.] Page 1, line 28 through page 2, line 1

Accordingly, one aspect of the present invention is to provide a smoking article including a tobacco column; a wrapper surrounding the tobacco column; and a carbon monoxide pump including an adsorbent for adsorbing carbon monoxide, wherein the carbon monoxide pump is aligned with the tobacco column so as to selectively divert carbon monoxide from main stream combustion products prior to inhaling by a smoker. [Emphasis Added.] Page 2, lines 19-24

As best seen in Figures 1A and 1B a smoking article includes a wrapper 12 surrounding a tobacco column 14 adjacent to carbon monoxide pump 16. Preferably, the pump 16 selects carbon monoxide for diversion from main stream smoke. [Emphasis Added.] Page 3, line 33 through page 4, line 3

In operation, the selected carbon monoxide pump 16 diverts carbon monoxide from main stream smoke to, for example, side stream smoke. A block diagram of the pump's operation is seen in Figure 3. Starting at the top of Figure 3, after a smoking article 10 including the carbon monoxide pump 16 is lit, a smoker draws on the article from the filtered end. As the smoker draws on the smoking article 10, the combustion products are drawn through the carbon monoxide pump 16 for diverting carbon monoxide from the main stream smoke. [Emphasis Added.] Page 4, lines 19-25

In an alternative embodiment, having no catalyst, the carbon monoxide pump 16 includes an adsorbent material. In this embodiment, as the main stream smoke passes over the adsorbent material, carbon monoxide is adsorbed from the main stream smoke onto the adsorbent material. During the delay between the current puff and the successive puff, which may be

called an inter-puff period, the concentration of carbon monoxide increases in gas phase within the adsorbent material due to its desorption. The higher concentration of the carbon monoxide in the vicinity of the adsorbent material creates a driving force that increases the flux of carbon monoxide from the adsorbent material so that it exits holes 18 proximate to the carbon monoxide pump 16. [Emphasis Added.] Page 5, lines 5-14

These sections of the specification show that the flux from the adsorbing material is separate from the mainstream combustion products. Thus, the rejection of Claims 1-3, 10-12, 24, and 40 under 35 U.S.C. 112, first paragraph has been show to be improper. The rejection having been shown to be improper should be withdrawn.

The Office Action also had rejected Claims 1-3, 22-30, 32-40, 46 and 47 under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,317,460 (Dale *et al.*) of record in view of US Patent No. 4,301,816 (Wahle *et al.*). Applicants traverse the rejection. Specifically, the rejection based on Dale *et al.* in view of Wahle *et al.* is improper because the short comings of Dale *et al.* are not remedied by combination with Wahle *et al.*

That is, Dale *et al.* and Wahle *et al.*, whether taken alone or in combination, neither discloses nor suggests a carbon monoxide pump including an adsorbent material for adsorbing carbon monoxide and subsequently releasing carbon monoxide or a reaction product thereof, thereby creating a flux from the adsorbent material separate from main stream combustion products, wherein the carbon monoxide pump is positioned proximate a smoker's mouthpiece end of the tobacco column with respect to the tobacco column so as to selectively divert carbon monoxide from main stream combustion products prior to inhaling by a smoker. Thus, Dale *et al.*, whether taken alone or in combination, neither discloses nor suggests a smoking article including a tobacco column, a wrapper surrounding the tobacco column and a carbon monoxide pump or a mouthpiece for a smoking article comprising a fitting to receive a smoking article and a carbon monoxide pump.

Dale *et al.* merely discloses catalysts for the low temperature oxidation of carbon monoxide to carbon dioxide, used in smoking product filters. The catalysts are carried upon a support which should be microporous. The catalysts may include mixtures of tin or tin

compounds with other catalytic material. The catalysts may involve a Redox mechanism. The catalysts exhibit resistance to deactivation caused by contact with water.

Wahle *et al.* discloses filter cigarettes with multiplex filter mouthpieces wherein at least one filtering element constitutes an unwrapped filter plug having a reinforced porous peripheral layer produced in a machine which is equipped with a perforating device for tubular envelopes connecting the mouthpieces to the respective plain cigarettes, or with a device for making holes in the web of wrapping material which is subdivided into uniting bands. The holes are provided in those portions of tubular envelopes which surround the reinforced porous peripheral layers. Filtering elements which constitute unwrapped filter plugs may be disposed at the free ends of the mouthpieces or adjacent to the plain cigarettes.

The Office Action provides no evidence that one of ordinary skill in the art would have seen a motivation to combine Dale and Wahle to achieve Applicant's claimed invention, as must be done under the Administrative Procedures Act to justify rejection of the claims. *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). The 35 U.S.C. 35 U.S.C. 103(a) rejection, being improper, should thus be withdrawn.

Applicants have placed the case in condition for immediate allowance and such action directed to Claims 1-3, 22-40, 46 and 47 is respectfully requested. However, if any issue remains unresolved, Applicant's attorney would welcome the opportunity for a telephone interview to expedite allowance and issue.

Respectfully submitted,

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Date: October 14, 2002
File No.: 4800-090

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